

[illegible]

Figure 1H

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Figure 11

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DNA sequence 10511 b.p. AAGCTTTACTCG - ACGGCCAGTGCC linear

aag ctt tac tcg taa agc gag ttg aag gat cat att tag ttg cgt tta	48
Lys Leu Tyr Ser OCH Ser Glu Leu Lys Asp His Ile AMB Leu Arg Leu	
1 5 10 15	
tga gat aag att gaa agc acg tgt aaa atg ttt ccc gcg cgt tgg cac	96
OPA Asp Lys Ile Glu Ser Thr Cys Lys Met Phe Pro Ala Arg Trp His	
20 25 30	
aac tat tta caa tgc ggc caa gtt ata aaa gat tct aat ctg ata tgt	144
Asn Tyr Leu Gln Cys Gly Gln Val Ile Lys Asp Ser Asn Leu Ile Cys	
35 40 45	
ttt aaa aca cct ttg cgg ccc gag ttg ttt gcg tac gtg act agc gaa	192
Phe Lys Thr Pro Leu Arg Pro Glu Leu Phe Ala Tyr Val Thr Ser Glu	
50 55 60	
gaa gat gtg tgg acc gca gaa cag ata gta aaa caa aac cct agt att	240
Glu Asp Val Trp Thr Ala Glu Gln Ile Val Lys Gln Asn Pro Ser Ile	
65 70 75 80	
gga gca ata atc gat tta acc aac acg tct aaa tat tat gat ggt gtg	288
Gly Ala Ile Ile Asp Leu Thr Asn Thr Ser Lys Tyr Tyr Asp Gly Val	
85 90 95	
cat ttt ttg cgg gcg ggc ctg tta tac aaa aaa att caa gta cct ggc	336
His Phe Leu Arg Ala Gly Leu Leu Tyr Lys Lys Ile Gln Val Pro Gly	
100 105 110	
cag act ttg ccg cct gaa agc ata gtt caa gaa ttt att gac acg gta	384
Gln Thr Leu Pro Pro Glu Ser Ile Val Gln Glu Phe Ile Asp Thr Val	
115 120 125	
aaa gaa ttt aca gaa aag tgt ccc ggc atg ttg gtg ggc gtg cac tgc	432
Lys Glu Phe Thr Glu Lys Cys Pro Gly Met Leu Val Gly Val His Cys	
130 135 140	
aca cac ggt att aat cgc acc ggt tac atg gtg tgc aga tat tta atg	480
Thr His Gly Ile Asn Arg Thr Gly Tyr Met Val Cys Arg Tyr Leu Met	
145 150 155 160	
cac acc ctg ggt att gcg ccg cag gaa gcc ata gat aga ttc gaa aaa	528
His Thr Leu Gly Ile Ala Pro Gln Glu Ala Ile Asp Arg Phe Glu Lys	
165 170 175	
gcc aga ggt cac aaa att gaa aga caa aat tac gtt caa gat tta tta	576
Ala Arg Gly His Lys Ile Glu Arg Gln Asn Tyr Val Gln Asp Leu Leu	
180 185 190	
att taa tta ata tta ttt gca ttc ttt aac aaa tac ttt atc cta ttt	624
Ile OCH Leu Ile Leu Phe Ala Phe Phe Asn Lys Tyr Phe Ile Leu Phe	
195 200 205	
tca aat tgt tgc gct tct tcc agc gaa cca aaa cta tgc ttc gct tgc	672
Ser Asn Cys Cys Ala Ser Ser Ser Glu Pro Lys Leu Cys Phe Ala Cys	
210 215 220	

Figure 2A

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tcc gtt tag ctt gta gcc gat cag tgg cgt tgt tcc aat cga cgg tag	720
Ser Val AMB Leu Val Ala Asp Gln Trp Arg Cys Ser Asn Arg Arg AMB	
225 230 235 240	
gat tag gcc gga tat tct cca cca caa tgt tgg caa cgt tga tgt tac	768
Asp AMB Ala Gly Tyr Ser Pro Pro Gln Cys Trp Gln Arg OPA Cys Tyr	
245 250 255	
gtt tat gct ttt ggt ttt cca cgt acg tct ttt ggc cgg taa tag ccg	816
Val Tyr Ala Phe Gly Phe Pro Arg Thr Ser Phe Gly Arg OCH AMB Pro	
260 265 270	
taa acg tag tgc cgt cgc gcg tca cgc aca aca ccg gat gtt tgc gct	864
ACH Thr AMB Cys Arg Arg Ala Ser Arg Thr Thr Pro Asp Val Cys Ala	
275 280 285	
tgt ccg cgg ggt att gaa ccg cgc gat ccg aca aat cca cca ctt tgg	912
Cys Pro Arg Gly Ile Glu Pro Arg Asp Pro Thr Asn Pro Pro Leu Trp	
290 295 300	
caa cta aat cgg tga cct gcg cgt ctt ttt tct gca tta ttt cgt ctt	960
Gln Leu Asn Arg OPA Pro Ala Arg Leu Phe Ser Ala Leu Phe Arg Leu	
305 310 315 320	
tct ttt gca tgg ttt cct gga agc cgg tgt aca tgc ggt tta gat cag	1008
Ser Phe Ala Trp Phe Pro Gly Ser Arg Cys Thr Cys Gly Leu Asp Gln	
325 330 335	
tca tga cgc gcg tga cct gca aat ctt tgg cct cga tct gct tgt cct	1056
Ser OPA Arg Ala OPA Pro Ala Asn Leu Trp Pro Arg Ser Ala Cys Pro	
340 345 350	
tga tgg caa cga tgc gtt caa taa act ctt gtt ttt taa caa gtt cct	1104
OPA Trp Gln Arg Cys Val Gln OCH Thr Leu Val Phe OCH Gln Val Pro	
355 360 365	
cgg ttt ttt gcg cca cca ccg ctt gca gcg cgt ttg tgt gct cgg tga	1152
Arg Phe Phe Ala Pro Pro Leu Ala Ala Arg Leu Cys Ala Arg OPA	
370 375 380	
atg tcg caa tca gct tag tca cca act gtt tgc tct cct cct ccc gtt	1200
Met Ser Gln Ser Ala AMB Ser Pro Thr Val Cys Ser Pro Pro Pro Val	
385 390 395 400	
gtt tga tcg cgg gat cgt act tgc cgg tgc aga gca ctt gag gaa tta	1248
Val OPA Ser Arg Asp Arg Thr Cys Arg Cys Arg Ala Leu Glu Glu Leu	
405 410 415	
ctt ctt cta aaa gcc att ctt gta att cta tgg cgt aag gca att tgg	1296
Leu Leu Leu Lys Ala Ile Leu Val Ile Leu Trp Arg Lys Ala Ile Trp	
420 425 430	
act tca taa tca gct gaa tca cgc cgg att tag taa tga gca ctg tat	1344
Thr Ser OCH Ser Ala Glu Ser Arg Arg Ile AMB OCH OPA Ala Leu Tyr	
435 440 445	
gcg gct gca aat aca gcg ggt cgc ccc ttt tca cga cgc tgt tag agg	1392
Ala Ala Ala Asn Thr Ala Gly Arg Pro Phe Ser Arg Arg Cys AMB Arg	
450 455 460	

Figure 2B

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tag ggc ccc cat ttt gga tgg tct gct caa ata acg att tgt att tat	1440
AMB Gly Pro His Phe Gly Trp Ser Ala Gln Ile Thr Ile Cys Ile Tyr	
465 470 475 480	
tgt cta cat gaa cac gta tag ctt tat cac aaa ctg tat att tta aac	1488
Cys Leu His Glu His Val AMB Leu Tyr His Lys Leu Tyr Ile Leu Asn	
485 490 495	
tgt tag cga cgt cct tgg cca cga acc gga cct gtt ggt cgc gct cta	1536
Cys AMB Arg Arg Pro Trp Pro Arg Thr Gly Pro Val Gly Arg Ala Leu	
500 505 510	
gca cgt acc gca ggt tga acg tat ctt ctc caa att taa att ctc caa	1584
Ala Arg Thr Ala Gly OPA Thr Tyr Leu Leu Gln Ile OCH Ile Leu Gln	
515 520 525	
ttt taa cgc gag cca ttt tga tac acg tgt gtc gat ttt gca aca act	1632
Phe OCH Arg Glu Pro Phe OPA Tyr Thr Cys Val Asp Phe Ala Thr Thr	
530 535 540	
att gtt ttt taa cgc aaa cta aac tta ttg tgg taa gca ata att aaa	1680
Ile Val Phe OCH Arg Lys Leu Asn Leu Leu Trp OCH Ala Ile Ile Lys	
545 550 555 560	
tat ggg gga aca tgc gcc gct aca aca ctc gtc gtt atg aac gca gac	1728
Tyr Gly Gly Thr Cys Ala Ala Thr Thr Leu Val Val Met Asn Ala Asp	
565 570 575	
ggc gcc ggt ctc ggc gca agc ggc taa aac gtg ttg cgc gtt caa cgc	1776
Gly Ala Gly Leu Gly Ala Ser Gly OCH Asn Val Leu Arg Val Gln Arg	
580 585 590	
ggc aaa cat cgc aaa agc caa tag tac agt ttt gat ttg cat att aac	1824
Gly Lys His Arg Lys Ser Gln AMB Tyr Ser Phe Asp Leu His Ile Asn	
595 600 605	
ggc gat ttt tta aat tat ctt att taa taa ata gtt atg acg cct aca	1872
Gly Asp Phe Leu Asn Tyr Leu Ile OCH OCH Ile Val Met Thr Pro Thr	
610 615 620	
act ccc cgc ccg cgt tga ctc gct gca cct cga gca gtt cgt tga cgc	1920
Thr Pro Arg Pro Arg OPA Leu Ala Ala Pro Arg Ala Val Arg OPA Arg	
625 630 635 640	
ctt cct ccg tgt ggc cga aca cgt cga gcg ggt ggt cga tga cca gcg	1968
Leu Pro Pro Cys Gly Arg Thr Arg Arg Ala Gly Gly Arg OPA Pro Ala	
645 650 655	
gcg tgc cgc acg cga cgc aca agt atc tgt aca ccg aat gat cgt cgg	2016
Ala Cys Arg Thr Arg Arg Thr Ser Ile Cys Thr Pro Asn Asp Arg Arg	
660 665 670	
gcg aag gca cgt cgg cct cca agt ggc aat att ggc aaa ttc gaa aat	2064
Ala Lys Ala Arg Arg Pro Pro Ser Gly Asn Ile Gly Lys Phe Glu Asn	
675 680 685	
ata tac agt tgg gtt gtt tgc gca tat cta tcg tgg cgt tgg gca tgt	2112
Ile Tyr Ser Trp Val Val Cys Ala Tyr Leu Ser Trp Arg Trp Ala Cys	
690 695 700	

Figure 2C

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acg tcc gaa cgt tga ttt gca tgc aag ccg aaa tta aat cat tgc gat	2160
Thr Ser Glu Arg OPA Phe Ala Cys Lys Pro Lys Leu Asn His Cys Asp	
705 710 715 720	
tag tgc gat taa aac gtt gta cat cct cgc ttt taa tca tgc cgt cga	2208
AMB Cys Asp OCH Asn Val Val His Pro Arg Phe OCH Ser Cys Arg Arg	
725 730 735	
tta aat cgc gca atc gag tca agt gat caa agt gtg gaa taa tgt ttt	2256
Leu Asn Arg Ala Ile Glu Ser Ser Asp Gln Ser Val Glu OCH Cys Phe	
740 745 750	
ctt tgt att ccc gag tca agc gca gcg cgt att tta aca aac tag cca	2304
Leu Cys Ile Pro Glu Ser Ser Ala Ala Arg Ile Leu Thr Asn AMB Pro	
755 760 765	
tct tgt aag tta gtt tca ttt aat gca act tta tcc aat aat ata tta	2352
Ser Cys Lys Leu Val Ser Phe Asn Ala Thr Leu Ser Asn Asn Ile Leu	
770 775 780	
tgt atc gca cgt caa gaa tta aca atg cgc ccg ttg tcg cat ctc aac	2400
Cys Ile Ala Arg Gln Glu Leu Thr Met Arg Pro Leu Ser His Leu Asn	
785 790 795 800	
acg act atg ata gag atc aaa taa agc gcg aat taa ata gct tgc gac	2448
Thr Thr Met Ile Glu Ile Lys OCH Ser Ala Asn OCH Ile Ala Cys Asp	
805 810 815	
gca acg tgc acg atc tgt gca cgc gtt ccg gca cga gct ttg att gta	2496
Ala Thr Cys Thr Ile Cys Ala Arg Val Pro Ala Arg Ala Leu Ile Val	
820 825 830	
ata agt ttt tac gaa gcg atg aca tga ccc ccg tag tga caa cga tca	2544
Ile Ser Phe Tyr Glu Ala Met Thr OPA Pro Pro AMB OPA Gln Arg Ser	
835 840 845	
cgc cca aaa gaa ctg ccg act aca aaa tta ccg agt atg tcg gtg acg	2592
Arg Pro Lys Glu Leu Pro Thr Thr Lys Leu Pro Ser Met Ser Val Thr	
850 855 860	
tta aaa cta tta agc cat cca atc gac cgt tag tcg aat cag gac cgc	2640
Leu Lys Leu Leu Ser His Pro Ile Asp Arg AMB Ser Asn Gln Asp Arg	
865 870 875 880	
tgg tgc gag aag ccg cga agt atg gcg aat gca tcg tat aac gtg tgg	2688
Trp Cys Glu Lys Pro Arg Ser Met Ala Asn Ala Ser Tyr Asn Val Trp	
885 890 895	
agt ccg ctc att aga gcg tca tgt tta gac aag aaa gct aca tat tta	2736
Ser Pro Leu Ile Arg Ala Ser Cys Leu Asp Lys Lys Ala Thr Tyr Leu	
900 905 910	
att gat ccc gat gat ttt att gat aaa ttg acc cta act cca tac acg	2784
Ile Asp Pro Asp Asp Phe Ile Asp Lys Leu Thr Leu Thr Pro Tyr Thr	
915 920 925	
gta ttc tac aat ggc ggg gtt ttg gtc aaa att tcc gga ctg cga ttg	2832
Val Phe Tyr Asn Gly Gly Val Leu Val Lys Ile Ser Gly Leu Arg Leu	
930 935 940	

Figure 2D

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tac atg ctg tta acg gct ccg ccc act att aat gaa att aaa aat tcc	2880
Tyr Met Leu Leu Thr Ala Pro Pro Thr Ile Asn Glu Ile Lys Asn Ser	-
945 950 955 960	
aat ttt aaa aaa cgc agc aag aga aac att tgt atg aaa gaa tgc gta	2928
Asn Phe Lys Lys Arg Ser Lys Arg Asn Ile Cys Met Lys Glu Cys Val	
965 970 975	
gaa gga aag aaa aat gtc gtc gac atg ctg aac aac aag att aat atg	2976
Glu Gly Lys Lys Asn Val Val Asp Met Leu Asn Asn Lys Ile Asn Met	
980 985 990	
cct ccg tgt ata aaa aaa ata ttg aac gat ttg aaa gaa aac aat gta	3024
Pro Pro Cys Ile Lys Lys Ile Leu Asn Asp Leu Lys Glu Asn Asn Val	
995 1000 1005	
ccg cgc ggc ggt atg tac agg aag agg ttt ata cta aac tgt tac att	3072
Pro Arg Gly Gly Met Tyr Arg Lys Arg Phe Ile Leu Asn Cys Tyr Ile	
1010 1015 1020	
gca aac gtg gtt tgc tgt gcc aag tgt gaa aac cga tgt tta atc aag	3120
Ala Asn Val Val Ser Cys Ala Lys Cys Glu Asn Arg Cys Leu Ile Lys	
1025 1030 1035 1040	
gct ctg acg cat ttc tac aac cac gac tcc aag tgt gtg ggt gaa gtc	3168
Ala Leu Thr His Phe Tyr Asn His Asp Ser Lys Cys Val Gly Glu Val	
1045 1050 1055	
atg cat ctt tta atc aaa tcc caa gat gtg tat aaa cca cca aac tgc	3216
Met His Leu Leu Ile Lys Ser Gln Asp Val Tyr Lys Pro Pro Asn Cys	
1060 1065 1070	
caa aaa atg aaa act gtc gac aag ctc tgt ccg ttt gct ggc aac tgc	3264
Gln Lys Met Lys Thr Val Asp Lys Leu Cys Pro Phe Ala Gly Asn Cys	
1075 1080 1085	
aag ggt ctc aat cct att tgt aat tat tga ata ata aaa caa tta taa	3312
Lys Gly Leu Asn Pro Ile Cys Asn Tyr OPA Ile Ile Lys Gln Leu OCH	
1090 1095 1100	
atg cta aat ttg ttt ttt att aac gat aca aac caa acg caa caa gaa	3360
Met Leu Asn Leu Phe Phe Ile Asn Asp Thr Asn Gln Thr Gln Gln Glu	
1105 1110 1115 1120	
cat ttg tag tat tat cta taa ttg aaa acg cgt agt tat aat cgc tga	3408
His Leu AMB Tyr Tyr Leu OCH Leu Lys Thr Arg Ser Tyr Asn Arg OPA	
1125 1130 1135	
ggt aat att taa aat cat ttt caa atg att cac agt taa ttt gcg aca	3456
Gly Asn Ile OCH Asn His Phe Gln Met Ile His Ser OCH Phe Ala Thr	
1140 1145 1150	
ata taa ttt tat ttt cac ata aac tag acg cct tgt cgt ctt ctt ctt	3504
Ile OCH Phe Tyr Phe His Ile Asn AMB Thr Pro Cys Arg Leu Leu Leu	
1155 1160 1165	
cgt att cct tct ctt ttt cat ttt tct cct cat aaa aat taa cat agt	3552
Arg Ile Pro Ser Leu Phe His Phe Ser Pro His Lys Asn OCH His Ser	
1170 1175 1180	

Figure 2E

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tat tat cgt atc cat ata tgt atc tat cgt ata gag taa att ttt tgt	3600
Tyr Tyr Arg Ile His Ile Cys Ile Tyr Arg Ile Glu OCH Ile Phe Cys	
1185 1190 1195 1200	
tgt cat aaa tat ata tgt ctt ttt taa tgg ggt gta tag tac cgc tgc	3648
Cys His Lys Tyr Ile Cys Leu Phe OCH Trp Gly Val AMB Tyr Arg Cys	
1205 1210 1215	
gca tag ttt ttc tgt aat tta caa cag tgc tat ttt ctg gta gtt ctt	3696
Ala AMB Phe Phe Cys Asn Leu Gln Gln Cys Tyr Phe Leu Val Val Leu	
1220 1225 1230	
cgg agt gtg ttg ctt taa tta tta aat tta tat aat caa tga att tgg	3744
Arg Ser Val Leu Leu OCH Leu Leu Asn Leu Tyr Asn Gln OPA Ile Trp	
1235 1240 1245	
gat cgt cgg ttt tgt aca ata tgt tgc cgg cat agt acg cag ctt ctt	3792
Asp Arg Arg Phe Cys Thr Ile Cys Cys Arg His Ser Thr Gln Leu Leu	
1250 1255 1260	
cta gtt caa tta cac cat ttt tta gca gca ccg gat taa cat aac ttt	3840
Leu Val Gln Leu His His Phe Leu Ala Ala Pro Asp OCH His Asn Phe	
1265 1270 1275 1280	
cca aaa tgt tgt acg aac cgt taa aca aaa aca gtt cac ctc cct ttt	3888
Pro Lys Cys Cys Thr Asn Arg OCH Thr Lys Thr Val His Leu Pro Phe	
1285 1290 1295	
cta tac tat tgt ctg cga gca gtt gtt tgt tgt taa aaa taa cag cca	3936
Leu Tyr Tyr Cys Leu Arg Ala Val Val Cys Cys OCH Lys OCH Gln Pro	
1300 1305 1310	
ttg taa tga gac gca caa act aat atc aca aac tgg aaa tgt cta tca	3984
Leu OCH OPA Asp Ala Gln Thr Asn Ile Thr Asn Trp Lys Cys Leu Ser	
1315 1320 1325	
ata tat agt tgc tga tat cat gga gat aat taa aat gat aac cat ctc	4032
Ile Tyr Ser Cys OPA Tyr His Gly Asp Asn OCH Asn Asp Asn His Leu	
1330 1335 1340	
gca aat aaa taa gta ttt tac tgt ttt cgt aac agt ttt gta ata aaa	4080
Ala Asn Lys OCH Val Phe Tyr Cys Phe Arg Asn Ser Phe Val Ile Lys	
1345 1350 1355 1360	
aaa cct ata aat att ccg gat tat tca tac cgt ccc acc atc ggg cgc	4128
Lys Pro Ile Asn Ile Pro Asp Tyr Ser Tyr Arg Pro Thr Ile Gly Arg	
1365 1370 1375	
gga tct atg cta cta gta aat cag tca cac caa ggc ttc aat aag gaa	4176
Gly Ser Met Leu Leu Val Asn Gln Ser His Gln Gly Phe Asn Lys Glu	
1380 1385 1390	
cac aca agc aag atg gta agc gct att gtt tta tat gtg ctt ttg gcg	4224
His Thr Ser Lys Met Val Ser Ala Ile Val Leu Tyr Val Leu Leu Ala	
1395 1400 1405	
gcg gcg gcg cat tct gcc ttt gcg gcg gat ctt gga tcc cat cat cac	4272
Ala Ala Ala His Ser Ala Phe Ala Ala Asp Leu Gly Ser His His His	
1410 1415 1420	

Figure 2F

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cac cac cac att gaa gga aga gaa ttc cag gtc caa ctg cag cag tct	4320
His His His Ile Glu Gly Arg Glu Phe Gln Val Gln Leu Gln Gln Ser	
1425 1430 1435 1440	
ggg gct gaa ctg gca aaa cct ggg gcc tca gtg aag ctg tcc tgc aag	4368
Gly Ala Glu Leu Ala Lys Pro Gly Ala Ser Val Lys Leu Ser Cys Lys	
1445 1450 1455	
gct tct ggc cac acc ttt act agc tac tgg atg cac tgg gta aaa cag	4416
Ala Ser Gly His Thr Phe Thr Ser Tyr Trp Met His Trp Val Lys Gln	
1460 1465 1470	
agg cct gga cag ggt ctg gaa tgg att gga tac att aat ctt agc agt	4464
Arg Pro Gly Gln Gly Leu Glu Trp Ile Gly Tyr Ile Asn Leu Ser Ser	
1475 1480 1485	
ggt tat att aag tac aat cag gag ttc aag gac aag gcc aca ttg act	4512
Gly Tyr Ile Lys Tyr Asn Gln Glu Phe Lys Asp Lys Ala Thr Leu Thr	
1490 1495 1500	
gca gac aaa tcc tcc aac aca gcc tac atg cat ctg agc agc ctg aca	4560
Ala Asp Lys Ser Ser Asn Thr Ala Tyr Met His Leu Ser Ser Leu Thr	
1505 1510 1515 1520	
tat gag gac tct gca gtc tat tac tgt gca agg gca gct cag gct acg	4608
Tyr Glu Asp Ser Ala Val Tyr Tyr Cys Ala Arg Ala Ala Gln Ala Thr	
1525 1530 1535	
acc ttt gac tac tgg ggc caa ggc acc act ctc aca gtc tcc tca ggt	4656
Thr Phe Asp Tyr Trp Gly Gln Gly Thr Thr Leu Thr Val Ser Ser Gly	
1540 1545 1550	
gga ggc ggt tca ggc gga ggt ggc tct ggc ggt ggc gga tgc gac att	4704
Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Asp Ile	
1555 1560 1565	
gtg atg atc cag tct cac aaa ttc atg tcc aca tca gta gga gac agg	4752
Val Met Ile Gln Ser His Lys Phe Met Ser Thr Ser Val Gly Asp Arg	
1570 1575 1580	
gtc agc atc acc tgc aag gcc agt cag gat gtg agt act gct gta ggc	4800
Val Ser Ile Thr Cys Lys Ala Ser Gln Asp Val Ser Thr Ala Val Gly	
1585 1590 1595 1600	
tgg tat caa caa aaa cca ggg caa tct cct aaa cta ctg att tac tgg	4848
Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile Tyr Trp	
1605 1610 1615	
gca tcc acc cgg cac act gga gtc cct gat cgc ttc aca ggc agt gga	4896
Ala Ser Thr Arg His Thr Gly Val Pro Asp Arg Phe Thr Gly Ser Gly	
1620 1625 1630	
tct ggg aca gat tat act ctc acc atc agc agt gtg cag gct gaa gac	4944
Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Val Gln Ala Glu Asp	
1635 1640 1645	
ctg gca ctt tat tac tgt cag caa cat tat agc act cct ccg acg ttc	4992
Leu Ala Leu Tyr Tyr Cys Gln Gln His Tyr Ser Thr Pro Pro Thr Phe	
1650 1655 1660	

Figure 2G

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ggt gga ggc acc aag ctg gga atc aaa cgg gct ccc ggg gga tgt taa	5040
Gly Gly Gly Thr Lys Leu Gly Ile Lys Arg Ala Pro Gly Gly Cys OCH	
1665 1670 1675 1680	
aga tct gat cct ttc ctg gga ccc ggc aag aac caa aaa ctc act ctc	5088
Arg Ser Asp Pro Phe Leu Gly Pro Gly Lys Asn Gln Lys Leu Thr Leu	
1685 1690 1695	
ttc aag gaa atc cgt aat gtt aaa ccc gac acg atg aag ctt gtc gtt	5136
Phe Lys Glu Ile Arg Asn Val Lys Pro Asp Thr Met Lys Leu Val Val	
1700 1705 1710	
gga tgg aaa gga aaa gag ttc tac agg gaa act tgg acc cgc ttc atg	5184
Gly Trp Lys Gly Lys Glu Phe Tyr Arg Glu Thr Trp Thr Arg Phe Met	
1715 1720 1725	
gaa gac agc ttc ccc att gtt aac gac caa gaa gtg atg gat gtt ttc	5232
Glu Asp Ser Phe Pro Ile Val Asn Asp Gln Glu Val Met Asp Val Phe	
1730 1735 1740	
ctt gtt gtc aac atg cgt ccc act aga ccc aac cgt tgt tac aaa ttc	5280
Leu Val Val Asn Met Arg Pro Thr Arg Pro Asn Arg Cys Tyr Lys Phe	
1745 1750 1755 1760	
ctg gcc caa cac gct ctg cgt tgc gac ccc gac tat gta cct cat gac	5328
Leu Ala Gln His Ala Leu Arg Cys Asp Pro Asp Tyr Val Pro His Asp	
1765 1770 1775	
gtg att agg atc gtc gag cct tca tgg gtg ggc agc aac aac gag tac	5376
Val Ile Arg Ile Val Glu Pro Ser Trp Val Gly Ser Asn Asn Glu Tyr	
1780 1785 1790	
cgc atc agc ctg gct aag aag ggc ggc ggc tgc cca ata atg aac ctt	5424
Arg Ile Ser Leu Ala Lys Lys Gly Gly Gly Cys Pro Ile Met Asn Leu	
1795 1800 1805	
cac tct gag tac acc aac tgc ttc gaa cag ttc atc gat cgt gtc atc	5472
His Ser Glu Tyr Thr Asn Ser Phe Glu Gln Phe Ile Asp Arg Val Ile	
1810 1815 1820	
tgg gag aac ttc tac aag ccc atc gtt tac atc ggt acc gac tct gct	5520
Trp Glu Asn Phe Tyr Lys Pro Ile Val Tyr Ile Gly Thr Asp Ser Ala	
1825 1830 1835 1840	
gaa gag gag gaa att ctc ctt gaa gtt tcc ctg gtg ttc aaa gta aag	5568
Glu Glu Glu Glu Ile Leu Leu Glu Val Ser Leu Val Phe Lys Val Lys	
1845 1850 1855	
gag ttt gca cca gac gca cct ctg ttc act ggt ccg gcg tat taa aac	5616
Glu Phe Ala Pro Asp Ala Pro Leu Phe Thr Gly Pro Ala Tyr OCH Asn	
1860 1865 1870	
acg ata cat tgt tat tag tac att tat taa gcg cta gat tct gtg cgt	5664
Thr Ile His Cys Tyr AMB Tyr Ile Tyr OCH Ala Leu Asp Ser Val Arg	
1875 1880 1885	
tgt tga ttt aca gac aat tgt tgt acg tat ttt aat aat tca tta aat	5712
Cys OPA Phe Thr Asp Asn Cys Cys Thr Tyr Phe Asn Asn Ser Leu Asn	
1890 1895 1900	

Figure 2H

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tta taa tct tta ggg tgg tat gtt aga gcg aaa atc aaa tga ttt tca	5760
Leu OCH Ser Leu Gly Trp Tyr Val Arg Ala Lys Ile Lys OPA Phe Ser	
1905 1910 1915 1920	
gcg tct tta tat ctg aat tta aat att aaa tcc tca ata gat ttg taa	5808
Ala Ser Leu Tyr Leu Asn Leu Asn Ile Lys Ser Ser Ile Asp Leu OCH	
1925 1930 1935	
aat agg ttt cga tta gtt tca aac aag ggt tgt ttt tcc gaa ccg atg	5856
Asn Arg Phe Arg Leu Val Ser Asn Lys Gly Cys Phe Ser Glu Pro Met	
1940 1945 1950	
gct gga cta tct aat gga ttt tcg ctc aac gcc aca aaa ctt gcc aaa	5904
Ala Gly Leu Ser Asn Gly Phe Ser Leu Asn Ala Thr Lys Leu Ala Lys	
1955 1960 1965	
tct tgt agc agc aat cta gct ttg tcg ata ttc gtt tgt gtt ttg ttt	5952
Ser Cys Ser Ser Asn Leu Ala Leu Ser Ile Phe Val Cys Val Leu Phe	
1970 1975 1980	
tgt aat aaa ggt tcg acg tcg ttc aaa ata tta tgc gct ttt gta ttt	6000
Cys Asn Lys Gly Ser Thr Ser Phe Lys Ile Leu Cys Ala Phe Val Phe	
1985 1990 1995 2000	
ctt tca tca ctg tcg tta gtg tac aat tga ctc gac gta aac acg tta	6048
Leu Ser Ser Leu Ser Leu Val Tyr Asn OPA Leu Asp Val Asn Thr Leu	
2005 2010 2015	
aat aaa gct tgg aca tat tta aca tcg ggc gtg tta gct tta tta ggc	6096
Asn Lys Ala Trp Thr Tyr Leu Thr Ser Gly Val Leu Ala Leu Leu Gly	
2020 2025 2030	
cga tta tcg tcg tcg tcc caa ccc tcg tcg tta gaa gtt gct tcc gaa	6144
Arg Leu Ser Ser Ser Gln Pro Ser Ser Leu Glu Val Ala Ser Glu	
2035 2040 2045	
gac gat ttt gcc ata gcc aca cga cgc cta tta att gtg tcg gct aac	6192
Asp Asp Phe Ala Ile Ala Thr Arg Arg Leu Leu Ile Val Ser Ala Asn	
2050 2055 2060	
acg tcc gcg atc aaa ttt gta gtt gag ctt ttt gga att att tct gat	6240
Thr Ser Ala Ile Lys Phe Val Val Glu Leu Phe Gly Ile Ile Ser Asp	
2065 2070 2075 2080	
tgc ggg cgt ttt tgg gcg ggt ttc aat cta act gtg ccc gat ttt aat	6288
Cys Gly Arg Phe Trp Ala Gly Phe Asn Leu Thr Val Pro Asp Phe Asn	
2085 2090 2095	
tca gac aac acg tta gaa agc gat ggt gca ggc ggt ggt aac att tca	6336
Ser Asp Asn Thr Leu Glu Ser Asp Gly Ala Gly Gly Gly Asn Ile Ser	
2100 2105 2110	
gac ggc aaa tct act aat ggc ggc ggt ggt gga gct gat gat aaa tct	6384
Asp Gly Lys Ser Thr Asn Gly Gly Gly Gly Gly Ala Asp Asp Lys Ser	
2115 2120 2125	
acc atc ggt gga ggc gca ggc ggg gct ggc ggc gga ggc gga ggc gga	6432
Thr Ile Gly Gly Gly Ala Gly Gly Ala Gly Gly Gly Gly Gly Gly Gly	
2130 2135 2140	

Figure 2I

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ggt ggt ggc ggt gat gca gac ggc ggt tta ggc tca aat gtc tct tta Gly Gly Gly Gly Asp Ala Asp Gly Gly Leu Gly Ser Asn Val Ser Leu 2145 2150 2155 2160	6480
ggc aac aca gtc ggc acc tca act att gta ctg gtt tcg ggc gcc gtt Gly Asn Thr Val Gly Thr Ser Thr Ile Val Leu Val Ser Gly Ala Val 2165 2170 2175	6528
ttt ggt ttg acc ggt ctg aga cga gtg cga ttt ttt tcg ttt cta ata Phe Gly Leu Thr Gly Leu Arg Arg Val Arg Phe Phe Ser Phe Leu Ile 2180 2185 2190	6576
gct tcc aac aat tgt tgt ctg tcg tct aaa ggt gca gcg ggt tga ggt Ala Ser Asn Asn Cys Cys Leu Ser Ser Lys Gly Ala Ala Gly OPA Gly 2195 2200 2205	6624
tcc gtc ggc att ggt gga gcg ggc ggc aat tca gac atc gat ggt ggt Ser Val Gly Ile Gly Gly Ala Gly Gly Asn Ser Asp Ile Asp Gly Gly 2210 2215 2220	6672
ggt ggt ggt gga ggc gct gga atg tta ggc acg gga gaa ggt ggt ggc Gly Gly Gly Gly Gly Ala Gly Met Leu Gly Thr Gly Glu Gly Gly Gly 2225 2230 2235 2240	6720
ggc ggt gcc gcc ggt ata att tgt tct ggt tta gtt tgt tcg cgc acg Gly Gly Ala Ala Gly Ile Ile Cys Ser Gly Leu Val Cys Ser Arg Thr 2245 2250 2255	6768
att gtg ggc acc ggc gca ggc gcc gct ggc tgc aca acg gaa ggt cgt Ile Val Gly Thr Gly Ala Gly Ala Ala Gly Cys Thr Thr Glu Gly Arg 2260 2265 2270	6816
ctg ctt cga ggc agc gct tgg ggt ggt ggc aat tca ata tta taa ttg Leu Leu Arg Gly Ser Ala Trp Gly Gly Gly Asn Ser Ile Leu OCH Leu 2275 2280 2285	6864
gaa tac aaa tcg taa aaa tct gct ata agc att gta att tcg cta tcg Glu Tyr Lys Ser OCH Lys Ser Ala Ile Ser Ile Val Ile Ser Leu Ser 2290 2295 2300	6912
ttt acc gtg ccg ata ttt aac aac cgc tca atg taa gca att gta ttg Phe Thr Val Pro Ile Phe Asn Asn Arg Ser Met OCH Ala Ile Val Leu 2305 2310 2315 2320	6960
taa aga gat tgt ctc aag ctc cgc acg ccg ata aca agc ctt ttc att OCH Arg Asp Cys Leu Lys Leu Arg Thr Pro Ile Thr Ser Leu Phe Ile 2325 2330 2335	7008
ttt act aca gca ttg tag tgg cga gac act tcg ctg tcg tcg acg tac Phe Thr Thr Ala Leu AMB Trp Arg Asp Thr Ser Leu Ser Ser Thr Tyr 2340 2345 2350	7056
atg tat gct ttg ttg tca aaa acg tcg ttg gca agc ttt aaa ata ttt Met Tyr Ala Leu Leu Ser Lys Thr Ser Leu Ala Ser Phe Lys Ile Phe 2355 2360 2365	7104
aaa aga aca tct ctg ttc agc acc act gtg ttg tcg taa atg ttg ttt Lys Arg Thr Ser Leu Phe Ser Thr Thr Val Leu Ser OCH Met Leu Phe 2370 2375 2380	7152

Figure 2J

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ccg	gcg	gtt	cgt	aat	cat	ggg	cat	agc	tgt	ttc	ctg	tgt	gaa	att	gtt	7920
Pro	Ala	Val	Arg	Asn	His	Gly	His	Ser	Cys	Phe	Leu	Cys	Glu	Ile	Val	
2625				2630					2635				2640			
atc	cgc	tca	caa	ttc	cac	aca	aca	tac	gag	ccg	gaa	gca	taa	agt	gta	7968
Ile	Arg	Ser	Gln	Phe	His	Thr	Thr	Tyr	Glu	Pro	Glu	Ala	OCH	Ser	Val	
			2645					2650					2655			
aag	cct	ggg	gtg	cct	aat	gag	tga	gct	aac	tca	cat	taa	ttg	cgt	tgc	8016
Lys	Pro	Gly	Val	Pro	Asn	Glu	OPA	Ala	Asn	Ser	His	OCH	Leu	Arg	Cys	
		2660				2665						2670				
gct	cac	tgc	ccg	ctt	tcc	agt	cgg	gaa	acc	tgt	cgt	gcc	agc	tgc	att	8064
Ala	His	Cys	Pro	Leu	Ser	Ser	Arg	Glu	Thr	Cys	Arg	Ala	Ser	Cys	Ile	
	2675					2680					2685					
aat	gaa	tcg	gcc	aac	gcg	cgg	gga	gag	gcg	gtt	tgc	gta	ttg	ggc	gct	8112
Asn	Glu	Ser	Ala	Asn	Ala	Arg	Gly	Glu	Ala	Val	Cys	Val	Leu	Gly	Ala	
2690				2695						2700						
ctt	ccg	ctt	cct	cgc	tca	ctg	act	cgc	tgc	gct	cgg	tcg	ttc	ggc	tgc	8160
Leu	Pro	Leu	Pro	Arg	Ser	Leu	Thr	Arg	Cys	Ala	Arg	Ser	Phe	Gly	Cys	
2705				2710					2715				2720			
ggc	gag	cgg	tat	cag	ctc	act	caa	agg	cgg	taa	tac	ggg	tat	cca	cag	8208
Gly	Glu	Arg	Tyr	Gln	Leu	Thr	Gln	Arg	Arg	OCH	Tyr	Gly	Tyr	Pro	Gln	
		2725						2730				2735				
aat	cag	ggg	ata	acg	cag	gaa	aga	aca	tgt	gag	caa	aag	gcc	agc	aaa	8256
Asn	Gln	Gly	Ile	Thr	Gln	Glu	Arg	Thr	Cys	Glu	Gln	Lys	Ala	Ser	Lys	
		2740				2745						2750				
agg	cca	gga	acc	gta	aaa	agg	ccg	cgt	tgc	tgg	cgt	ttt	tcc	ata	ggc	8304
Arg	Pro	Gly	Thr	Val	Lys	Arg	Pro	Arg	Cys	Trp	Arg	Phe	Ser	Ile	Gly	
	2755					2760					2765					
tcc	gcc	ccc	ctg	acg	agc	atc	aca	aaa	atc	gac	gct	caa	gtc	aga	ggg	8352
Ser	Ala	Pro	Leu	Thr	Ser	Ile	Thr	Lys	Ile	Asp	Ala	Gln	Val	Arg	Gly	
	2770				2775				2780							
ggc	gaa	acc	cga	cag	gac	tat	aaa	gat	acc	agg	cgt	ttc	ccc	ctg	gaa	8400
Gly	Glu	Thr	Arg	Gln	Asp	Tyr	Lys	Asp	Thr	Arg	Arg	Phe	Pro	Leu	Glu	
2785			2790					2795				2800				
gct	ccc	tcg	tgc	gct	ctc	ctg	ttc	cga	ccc	tgc	cgc	tta	ccg	gat	acc	8448
Ala	Pro	Ser	Cys	Ala	Leu	Leu	Phe	Arg	Pro	Cys	Arg	Leu	Pro	Asp	Thr	
			2805					2810				2815				
tgt	ccg	cct	ttc	tcc	ctt	cgg	gaa	gcg	tgg	cgc	ttt	ctc	ata	gct	cac	8496
Cys	Pro	Pro	Phe	Ser	Leu	Arg	Glu	Ala	Trp	Arg	Phe	Leu	Ile	Ala	His	
		2820				2825										

Figure 2L

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act	atc	gtc	ttg	agt	cca	acc	cgg	taa	gac	acg	act	tat	cgc	cac	tgg	8640
Thr	Ile	Val	Leu	Ser	Pro	Thr	Arg	OCH	Asp	Thr	Thr	Tyr	Arg	His	Trp	
2865					2870					2875					2880	
cag	cag	cca	ctg	gta	aca	gga	tta	gca	gag	cga	ggg	atg	tag	gcg	gtg	8688
Gln	Gln	Pro	Leu	Val	Thr	Gly	Leu	Ala	Glu	Arg	Gly	Met	AMB	Ala	Val	
				2885					2890					2895		
cta	cag	agt	tct	tga	agt	ggg	ggc	cta	act	acg	gct	aca	cta	gaa	gga	8736
Leu	Gln	Ser	Ser	OPA	Ser	Gly	Gly	Leu	Thr	Thr	Ala	Thr	Leu	Glu	Gly	
			2900					2905					2910			
cag	tat	ttg	gta	tct	gcg	ctc	tgc	tga	agc	cag	tta	cct	tcg	gaa	aaa	8784
Gln	Tyr	Leu	Val	Ser	Ala	Leu	Cys	OPA	Ser	Gln	Leu	Pro	Ser	Glu	Lys	
		2915					2920					2925				
gag	ttg	gta	gct	ctt	gat	ccg	gca	aac	aaa	cca	ccg	ctg	gta	gcg	gtg	8832
Glu	Leu	Val	Ala	Leu	Asp	Pro	Ala	Asn	Lys	Pro	Pro	Leu	Val	Ala	Val	
	2930					2935					2940					
gtt	ttt	ttg	ttt	gca	agc	agc	aga	tta	cgc	gca	gaa	aaa	aag	gat	ctc	8880
Val	Phe	Leu	Phe	Ala	Ser	Ser	Arg	Leu	Arg	Ala	Glu	Lys	Lys	Asp	Leu	
2945					2950					2955					2960	
aag	aag	atc	ctt	tga	tct	ttt	cta	cgg	ggg	ctg	acg	ctc	agt	gga	acg	8928
Lys	Lys	Ile	Leu	OPA	Ser	Phe	Leu	Arg	Gly	Leu	Thr	Leu	Ser	Gly	Thr	
			2965					2970					2975			
aaa	act	cac	gtt	aag	gga	ttt	tgg	tca	tga	gat	tat	caa	aaa	gga	tct	8976
Lys	Thr	His	Val	Lys	Gly	Phe	Trp	Ser	OPA	Asp	Tyr	Gln	Lys	Gly	Ser	
		2980					2985					2990				
tca	cct	aga	tcc	ttt	taa	att	aaa	aat	gaa	gtt	tta	aat	caa	tct	aaa	9024
Ser	Pro	Arg	Ser	Phe	OCH	Ile	Lys	Asn	Glu	Val	Leu	Asn	Gln	Ser	Lys	
	2995					3000						3005				
gta	tat	atg	agt	aaa	ctt	ggg	ctg	aca	gtt	acc	aat	gct	taa	tca	gtg	9072
Val	Tyr	Met	Ser	Lys	Leu	Gly	Leu	Thr	Val	Thr	Asn	Ala	OCH	Ser	Val	
	3010					3015				3020						
agg	cac	cta	tct	cag	cga	tct	gtc	tat	ttc	gtt	cat	cca	tag	ttg	cct	9120
Arg	His	Leu	Ser	Gln	Arg	Ser	Val	Tyr	Phe	Val	His	Pro	AMB	Leu	Pro	
3025					3030					3035					3040	
gac	tcc	ccg	tcg	tgt	aga	taa	cta	cga	tac	ggg	agg	gct	tac	cat	ctg	9168
Asp	Ser	Pro	Ser	Cys	Arg	OCH	Leu	Arg	Tyr	Gly	Arg	Ala	Tyr	His	Leu	
			3045					3050					3055			
gcc	cca	gtg	ctg	caa	tga	tac	cgc	gag	acc	cac	gct	cac	cgg	ctc	cag	9216
Ala	Pro	Val	Leu	Gln	OPA	Tyr	Arg	Glu	Thr	His	Ala	His	Arg	Leu	Gln	
		3060					3065									

Figure 2M

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aag cta gag taa gta gtt cgc cag tta ata gtt tgc gca acg ttg ttg	9360
Lys Leu Glu OCH Val Val Arg Gln Leu Ile Val Cys Ala Thr Leu Leu	
3105 3110 3115 3120	
cca ttg cta cag gca tcg tgg tgt cac gct cgt cgt ttg gta tgg ctt	9408
Pro Leu Leu Gln Ala Ser Trp Cys His Ala Arg Arg Leu Val Trp Leu	
3125 3130 3135	
cat tca gct ccg gtt ccc aac gat caa ggc gag tta cat gat ccc cca	9456
His Ser Ala Pro Val Pro Asn Asp Gln Gly Glu Leu His Asp Pro Pro	
3140 3145 3150	
tgt tgt gca aaa aag cgg tta gct cct tcg gtc ctc cga tcg ttg tca	9504
Cys Cys Ala Lys Lys Arg Leu Ala Pro Ser Val Leu Arg Ser Leu Ser	
3155 3160 3165	
gaa gta agt tgg ccg cag tgt tat cac tca tgg tta tgg cag cac tgc	9552
Glu Val Ser Trp Pro Gln Cys Tyr His Ser Trp Leu Trp Gln His Cys	
3170 3175 3180	
ata att ctc tta ctg tca tgc cat ccg taa gat gct ttt ctg tga ctg	9600
Ile Ile Leu Leu Leu Ser Cys His Pro OCH Asp Ala Phe Leu OPA Leu	
3185 3190 3195 3200	
gtg agt act caa cca agt cat tct gag aat agt gta tgc ggc gac cga	9648
Val Ser Thr Gln Pro Ser His Ser Glu Asn Ser Val Cys Gly Asp Arg	
3205 3210 3215	
gtt gct ctt gcc cgg cgt caa tac ggg ata ata ccg cgc cac ata gca	9696
Val Ala Leu Ala Arg Arg Gln Tyr Gly Ile Ile Pro Arg His Ile Ala	
3220 3225 3230	
gaa ctt taa aag tgc tca tca ttg gaa aac gtt ctt cgg ggc gaa aac	9744
Glu Leu OCH Lys Cys Ser Ser Leu Glu Asn Val Leu Arg Gly Glu Asn	
3235 3240 3245	
tct caa gga tct tac cgc tgt tga gat cca gtt cga tgt aac cca ctc	9792
Ser Gln Gly Ser Tyr Arg Cys OPA Asp Pro Val Arg Cys Asn Pro Leu	
3250 3255 3260	
gtg cac cca act gat ctt cag cat ctt tta ctt tca cca gcg ttt ctg	9840
Val His Pro Thr Asp Leu Gln His Leu Leu Leu Ser Pro Ala Phe Leu	
3265 3270 3275 3280	
ggt gag caa aaa cag gaa ggc aaa atg ccg caa aaa agg gaa taa ggg	9888
Gly Glu Gln Lys Gln Glu Gly Lys Met Pro Gln Lys Arg Glu OCH Gly	
3285 3290 3295	
cga cac gga aat gtt gaa tac tca tac tct tcc ttt ttc aat att att	9936
Arg His Gly Asn Val Glu Tyr Ser Tyr Ser Ser Phe Phe Asn Ile Ile	
3300 3305 3310	
gaa gca ttt atc agg gtt att gtc tca tga gcg gat aca tat ttg aat	9984
Glu Ala Phe Ile Arg Val Ile Val Ser OPA Ala Asp Thr Tyr Leu Asn	
3315 3320 3325	
gta ttt aga aaa ata aac aaa tag ggg ttc cgc gca cat ttc ccc gaa	10032
Val Phe Arg Lys Ile Asn Lys AMB Gly Phe Arg Ala His Phe Pro Glu	
3330 3335 3340	

Figure 2N

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aag tgc cac ctg acg tct aag aaa ccattta tta tca tga cat taa cct	10080
Lys Cys His Leu Thr Ser Lys Lys Pro Leu Leu Ser OPA His OCH Pro	
3345 3350 3355 3360	
ata aaa ata ggc gta tca cga ggc cct ttc gtc tgc cgc gtt tgc gtg	10128
Ile Lys Ile Gly Val Ser Arg Gly Pro Phe Val Ser Arg Val Ser Val	
3365 3370 3375	
atg acg gtg aaa acc tct gac aca tgc agc tcc cgg aga cgg tca cag	10176
Met Thr Val Lys Thr Ser Asp Thr Cys Ser Ser Arg Arg Arg Ser Gln	
3380 3385 3390	
ctt gtc tgt aag cgg atg ccg gga gca gac aag ccc gtc agg gcg cgt	10224
Leu Val Cys Lys Arg Met Pro Gly Ala Asp Lys Pro Val Arg Ala Arg	
3395 3400 3405	
cag cgg gtg ttg gcg ggt gtc ggg gct ggc tta act atg cgg cat cag	10272
Gln Arg Val Leu Ala Gly Val Gly Ala Gly Leu Thr Met Arg His Gln	
3410 3415 3420	
agc aga ttg tac tga gag tgc acc ata tgc ggt gtg aaa tac cgc aca	10320
Ser Arg Leu Tyr OPA Glu Cys Thr Ile Cys Gly Val Lys Tyr Arg Thr	
3425 3430 3435 3440	
gat gcg taa gga gaa aat acc gca tca ggc gcc att cgc cat tca ggc	10368
Asp Ala OCH Gly Glu Asn Thr Ala Ser Gly Ala Ile Arg His Ser Gly	
3445 3450 3455	
tgc gca act gtt ggg aag ggc gat cgg tgc ggg cct ctt cgc tat tac	10416
Cys Ala Thr Val Gly Lys Gly Asp Arg Cys Gly Pro Leu Arg Tyr Tyr	
3460 3465 3470	
gcc agc tgg cga aag ggg gat gtg ctg caa ggc gat taa gtt ggg taa	10464
Ala Ser Trp Arg Lys Gly Asp Val Leu Gln Gly Asp OCH Val Gly OCH	
3475 3480 3485	
cgc cag ggt ttt ccc agt cac gac gtt gta aaa cga cgg cca gtg cc	10511
Arg Gln Gly Phe Pro Ser His Asp Val Val Lys Arg Arg Pro Val	
3490 3495 3500	

Figure 20

Fig.3

clonetherapt.99B3 :

VH sequence :

GAGGTGAAGCTTCTCCAGTCTGGAGGTGGCCTGGTGCAGCCTGGAGGATCCCTGAACT
CTCCTGTGCAGCCTCAGGAATCGATTTTAGTAGATACTGGATGAGTTGGGTTCGGCGGG
CTCCAGGGAAAGGACTAGAATGGATTGGAGAAATTAATCCAGATAGCAGTACAATAAAC
TATGCACCATCTCTAAAGGATAAATTCATCATCTCCAGAGACAACGCCAAAAATACGCT
GTACCTGCAAATGAGCAAAGTGAGATCTGAGGACACAGCCCTTTATTACTGTGCAAGAG
GACTGGGACAGAACTTGACTACTGGGGCCAAGGCACCACTCTCACAGTCTCCTCA

VL sequence :

GATATTGTGATGACGCAGGCTGCATTCTCCAATCCAGTCACTCTTGGAACATCAGCTTC
CATCTCCTGCAGGTCTAGTAAGAGTCTCCTACATAGTAATGGCATCACTTATTTGTATT
GGTATCTGCAGAAGCCAGGCCAGTCTCCTCAGCTCCTGATTTATCAGATGTCCAACCTT
GCCTCAGGAGTCCCAGACAGGTTCAGTAGCAGTGGGTGAGGAAGTATTTACACTGAG
AATCAGCAGAGTGGAGGCTGAGGATGTGGGTGTTTATTACTGTGCTCAAAATCTAGAAC
TTCCGTGGACGTTTCGGTGGAGGCACCAAGCTGGAAATCAAA

Fig.4

clonetherapt.88E10 :

VH sequence :

GAGGTGAAGCTGGTGGAGTCTGGAGGAGGCTTGGTACAGCCTGGGGGTTCTCTGAGTCT
CTCCTGTGCAGCTTCTGGATTCACCTTCACTGATTACTCCATGAACTGGGTCCGCCAGC
CTCCAGGGAAGACACTTGAGTGGTTGGCTTTTATTAGAAACAAAGCTAATGGTTACACA
GCAGAGTACAGTGCATCTGTGAAGGGTCGGTTCTCCATCTCCAGAGATAATTCCCAAAG
CATCCTCTATCTTCAAATGAATGCCCTGAGAGCTGAGGACAGTGCCACTTATTACTGTG
CAAGGGGATGGTATGCTATGGACTACTGGGGTCAAGGAACCTCAGTCACCGTCTCCTCA

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Fig. 5

clonetherapt.152C3 :

VH sequence :

GAGGTTCTGCTGCAGCAGTCTGTGGCAGAGCTTGTGAGGCCAGGGGCCTCAGTCAAGTT
GTCCTGCATAGTTTCTGACTTCAACATTAAACACACCTATATGCACTGGGTGAAACAGA
GGCCTGATCAGGGCCTGGAGTGGATTGGAAGGATTGATCCTGCGAATGGTAAACTATA
TATGCCCCGACGTTCCAGGGCAAGGCCACTATAACTGCGGACACATCCTCCAACACAGC
CTACCTGCATTTTCAGCAGCCTGACATCTGAGGACGCTGCCATCTATTACTGTGCTAGAG
CTGGGGCTGGCTACTTTGACTACTGGGGCCAAGGCACCACTCTCACAGTCTCCTCA

VL sequence :

GACATCTTGCTGACTCAGTCTCCAGCCATCCTGTCTGTGAGTCCAGGAGAAAGAGTCAG
TTTCTCCTGCAGGGCCAGTCAGAACATTGGCACAAGTATTTACTGGTATCAGCAAAGAA
CAAATGGTTCTCCAAGGCTTCTCATAAAGTATGTTTCTGAGTCTATCTCTGGGATCCCT
TCCAGGTTTAGTGGCAGTGGATCAGGGACAGAGTTTACTCTTAGCATCAACAGTGTGGA
GTCTGAAGATATTGCAGATTATTACTGTCAACAAAGTCATAGTTGGCCGCTCACGTTTCG
GTGCTGGGACCAAGCTGGAGCTGAAA

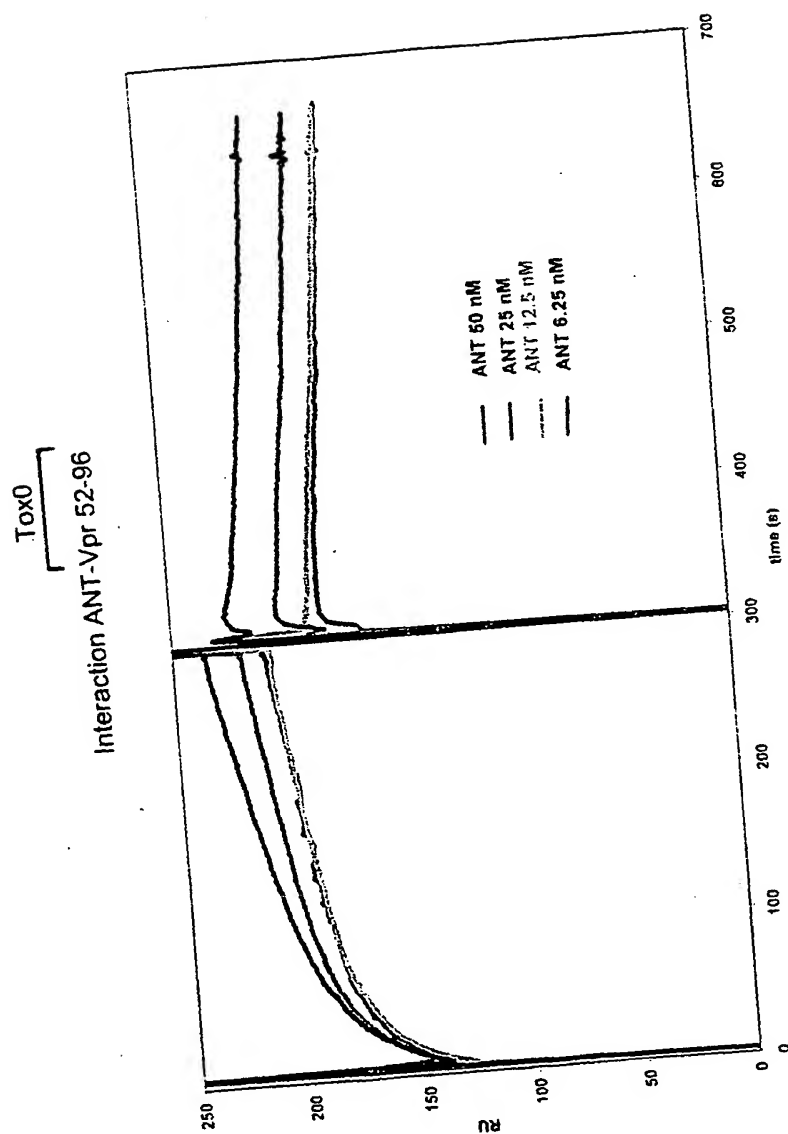


Figure 6

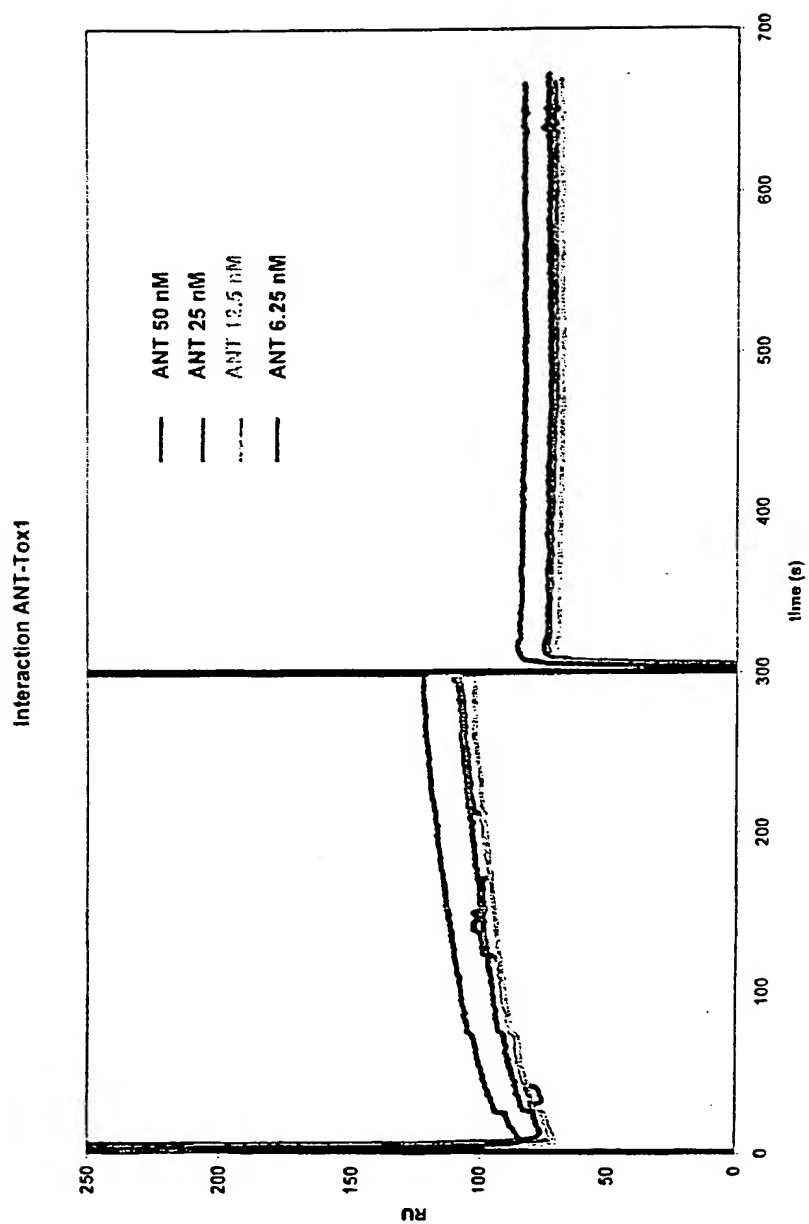


Figure 7

Tox0
Interaction VDAC-Vpr 52-96

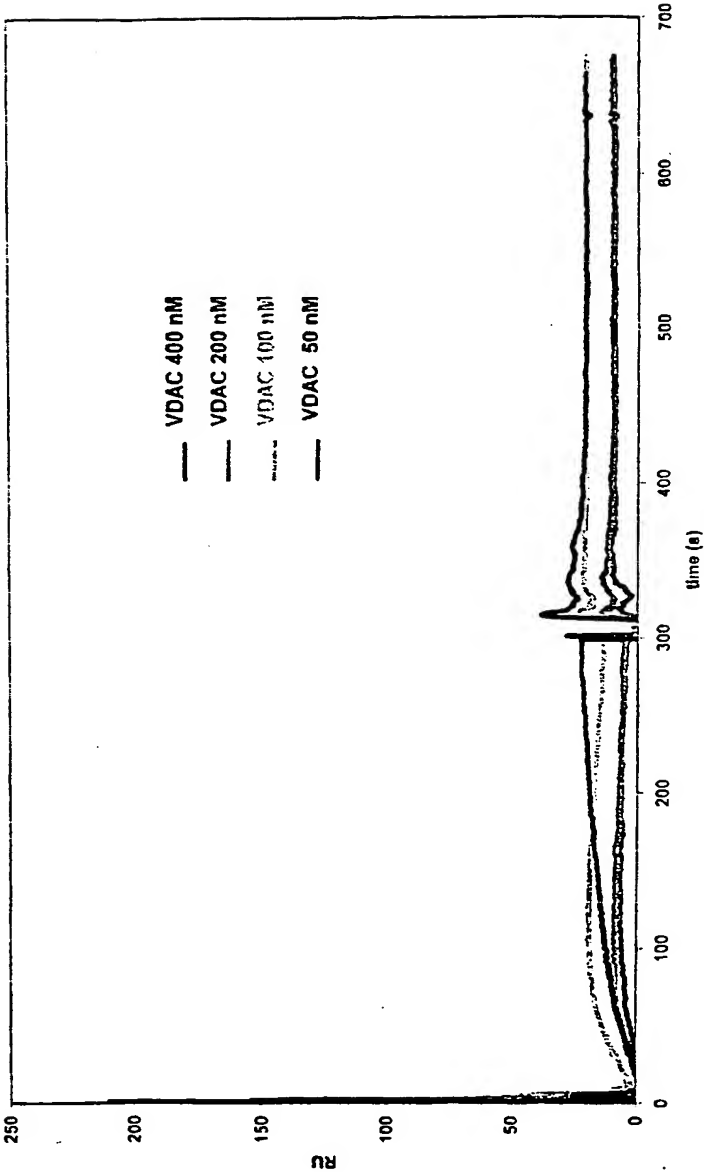


Figure 8

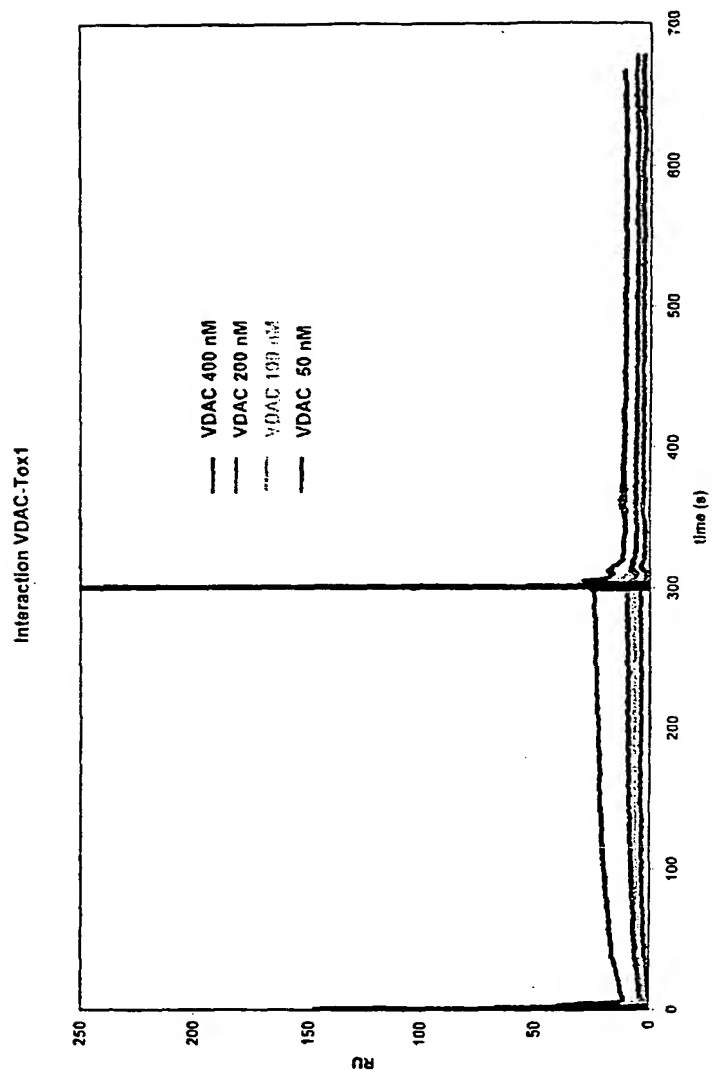


Figure 9

Interaction ANT 50 nM - peptides

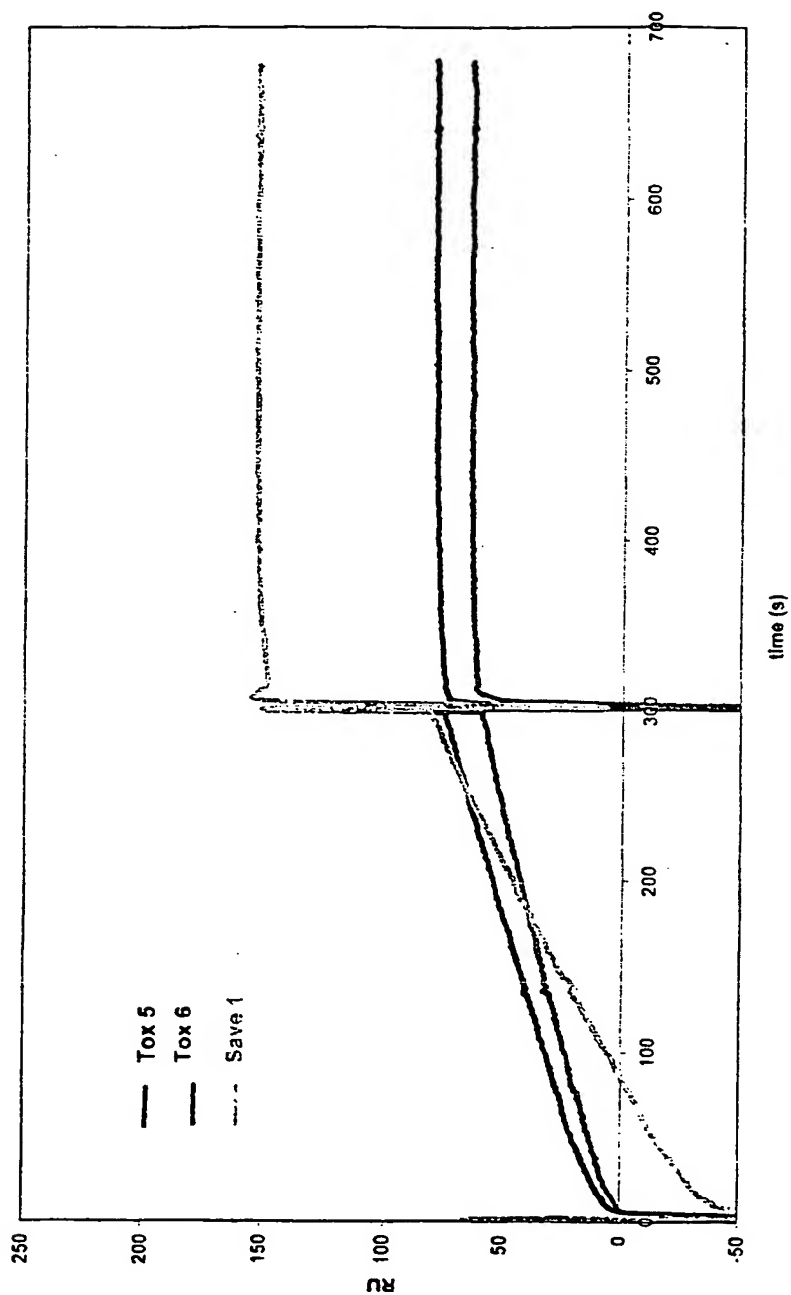


Figure 10

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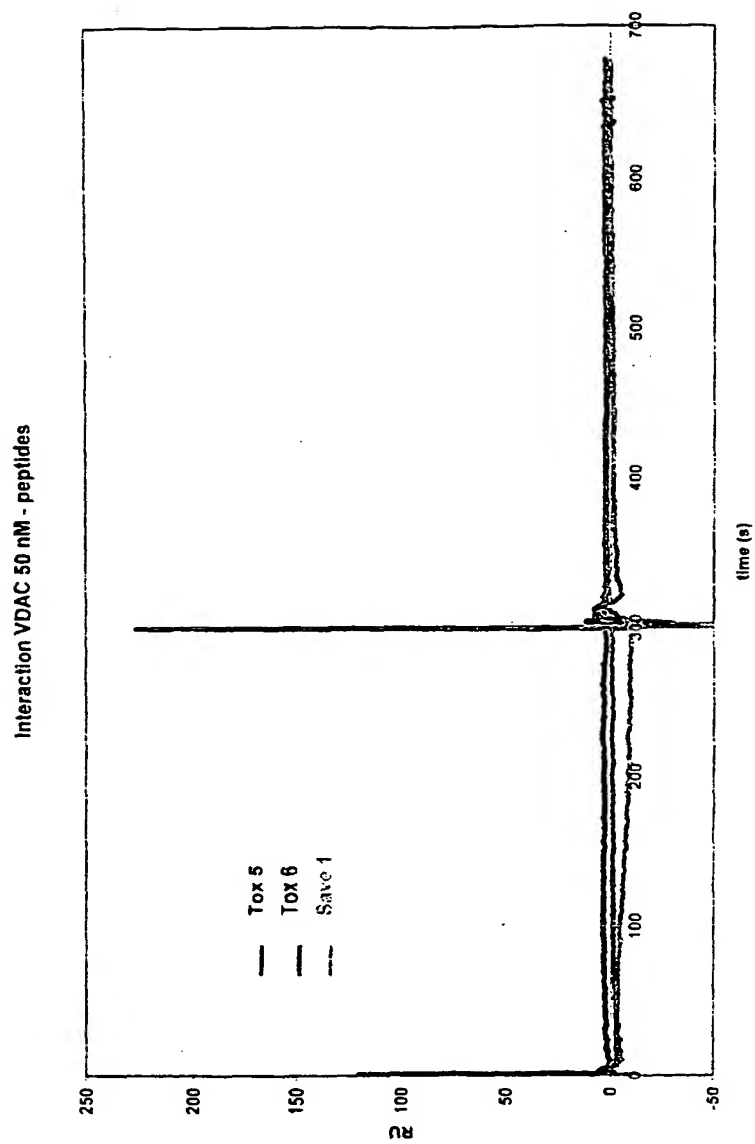
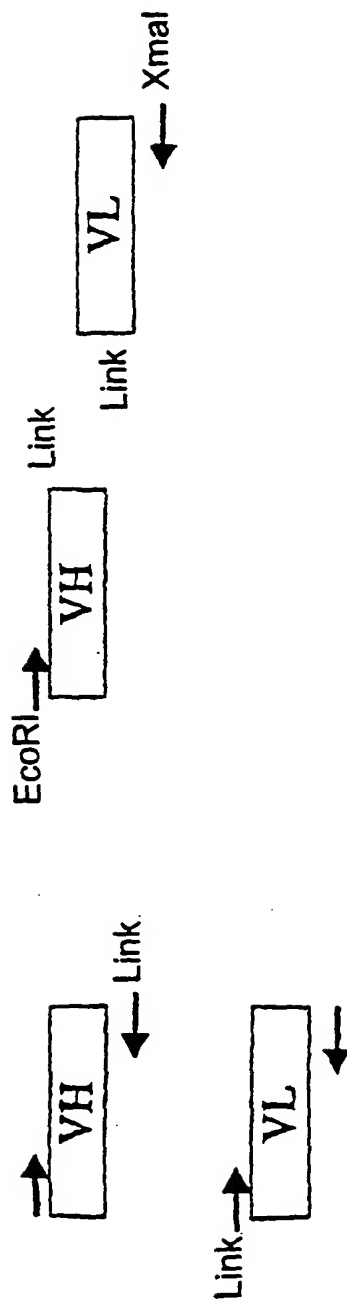


Figure 11

Second Step :



First Step :

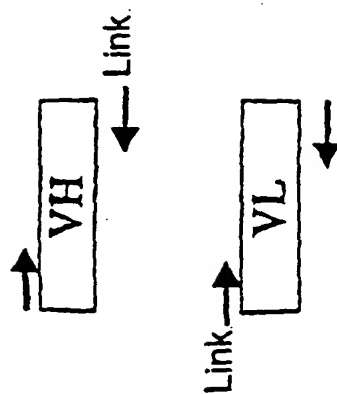


Figure 12 : Obtention of the VH/VL chimeric DNA

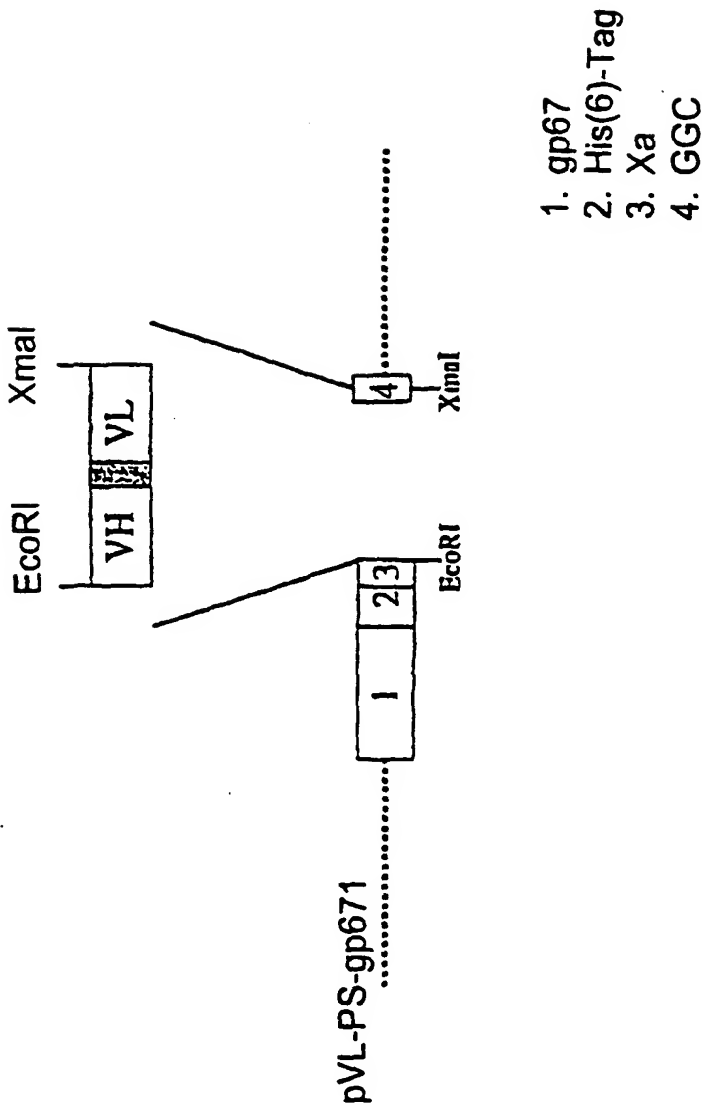


Figure 13 : Map of the ScFv transfer vector